G.R.S. III-2]

Previous references. (1923-4, Pat) File No. 33-23

Pat-33-23 95-1-7 Serial Nos. 10 11

Later references.

Sh 12-13-7 Pat 33-23

Pat-2-25 (1-2)

(13)

GENERAL AND REVENUE SECRETARIAT

Serial Nos. 7

Part B for Deptt 24

SUBJECT

Registering the Patent - (Re soil pan breaker

9C 1797 Dy 10.9.24

To

Messrs Ramsay and Son Calcutta

States that Government regret that they cannot see their way to reconsider the ~~order~~ already passed

783

13131

G. R. S. III-2

General and Revenue Secretariat.

Pat. File No. 33 of 1923

Serial No.

10 From messrs Remfrey & Son Calcutta Letter d 8/8/1924

They request reconsideration of the decision in the matter of registering three Patent & forward copies of Specifications that have been accepted in British India

1) their application was rejected in this office No. I.C. 878 dt 29/8/24 as it is not of much utility — they now request reconsideration of the order and to show that the invention has patentable features they have forwarded a copy each of British Indian Patents

2) orders rejected

29/8/24

3) The file may perhaps be sent to the Director of Agriculture for opinion

SMR 21/8

Rev Secy

4) Rep/s SMR 28/8

It merely

5) I agree

28/8 28.8

29-8

6) Forwarded with Compliments unofficially to the Director of Agriculture for favour of opinion

By S. Narayana Rao
for Rev Secy
29.8.24

NOTE—Contn. sheet.

Recd 3/9/24

G. R. S. III-2.

General and Revenue Secretariat. | Part 1 File No. 33 of 1923

Serial No.

13/31.

7) I regret that notwithstanding the fact that this invention has been patented in British India, the views expressed in my previous letter. in subject still hold
3.9.24 Sd/- [illegible]
Dy 4 Sept

8) may be rejected
Rev Secy
H McCandless

130
5.9

SMM 4/9

9) yes Dy 5/9 SMM 5/9

SMM 6/9

10) Draft/put up.
8/9/24

11) SSW
SMM 8/9

11 To

Messrs Remfry & Sim
No. C 1792 of 4/9/24.

With reference to their letter dated the 3rd Sept. regret they cannot see their way to reconsider the orders already passed.

B

NOTE—Contn. sheet.

9167

2783/15 (3

REGISTERED

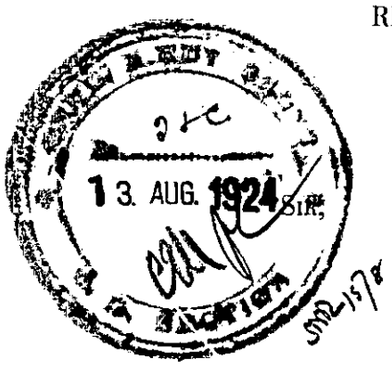
To

THE ~~CONTROLLER OF PATENTS~~, SECY. TO THE GOVT. OF MYSORE
~~PATENT OFFICE~~, GENL. & REV. DEPTS.
CALCUTTA. BANGALORE
MYSORE.

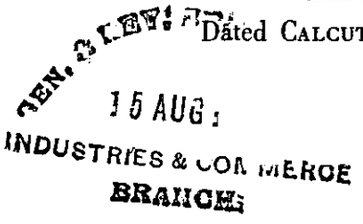
FROM

REMFRY & SON,
PATENT & TRADE-MARK ATTORNEYS,
CALCUTTA.

Pat- 33-23-10



Dated CALCUTTA, the 8th August 1924.



DEPT. P. FILE LR. M.
FILE INDICATION.
Mysore Pats.(Genl)

Sir,

re S. O. JACKSON. (MYSORE) "Soil-pan breaker".

No. -- *dated* --

We beg to acknowledge your favour No.I.C.878/Pat.33-23-8 ed 2/8/24 in which you say Mr. Jackson's Application for an ention entitled "Improved cultivating and soil pan breaking Implement" is rejected.

In this connection we would submit that the Invention is of great utility and in fact is most important.

We have applied for Patents in many countries for this Invention.

To show that the Invention has patentable features we send you a printed copy of the corresponding British Indian Patents Nos.9547 dated 31/7/23 and 9908 dated 17/12/23 which were both accepted on 21/4/24 and have now being sealed. The Mysore case is a combination of the two Indian cases.

We trust under these circumstances you will reconsider your decision.

We have the honour to be,
Sir,
Your most obedient servants,

2 Enclos :-
P/Specns 9547 & 9908.

L.B.

P/O (Genl.) 1,000—15-6-23, [12-7-22, 22-4-21, 8-6-20, 7-6-18, 4-2-14, 17-3-11]

GOVERNMENT OF INDIA.

THE PATENT OFFICE.

1, Council House Street, Calcutta.

SPECIFICATION

No. 9547. 31st July 1923.

Accepted 21st April 1924.

IMPROVED CULTIVATING AND SOIL-PAN BREAKING IMPLEMENT.

SYDNEY ODLING JACKSON, Tea Planter of Gatonga Post Office, Assam, British India.

The following specification particularly describes and ascertains the nature of the invention and the manner in which the same is to be performed.

The object of this invention is an improved cultivating implement particularly adapted for attacking and breaking up the pan accumulations which are often found below the surface of cultivated land. In its performance of this object the implement simultaneously usefully disturbs the surface soil. The implement is so used that these objects may be effected without the necessity of first removing the upper crust over the area of the pan to be broken and moreover without the disadvantages attaching to the existing methods of breaking up these pans.

The implement comprises a relatively slender blade adapted to be fixed approximately perpendicularly to the haft with which it is intended to be used, which blade in use is adapted to be driven into the ground, and a relatively broad, flat or enlarged leverage or fulcrum surface in the neighbourhood of the junction of the blade with the head which fits the haft. About this surface the blade of the cultivator, after being driven into the ground, is intended to be turned to break up the pan beneath the surface of the earth as described above.

The blade may have a chisel-shaped point the edge of which is preferably perpendicular to the direction of the haft. The chisel point may, moreover be relatively wide in comparison with the width of the rest of the blade.

The leverage or fulcrum surface may comprise a flat, or approximately flat, surface surrounding or covering the end of the haft.

Preferably the metal part of the implement will comprise a single unit, which may be made of cast steel, or be a drop forging or stamping, or be otherwise suitably made, and which is adapted in or for use to be fitted to a wooden haft, the unit comprising a blade and a leverage or fulcrum surface attached to the head of the implement, said surface projecting from the head.

The projecting parts forming the said leverage or fulcrum surface may be supported, stayed or strengthened by one or more ribs, webs or fins connecting it to the head of the implement.

One convenient form the implement may take will now be described with reference to the accompanying drawings in which like letters of reference indicate like parts and in which :—

Figure 1 is a side view and Figure 2 a plan.

In these Figures an implement is shown which may be cast, drop stamped or forged, be made of any suitable material, and may after manufacture be suitably heat treated, hardened or tempered if desired.

Price: ONE RUPEE.

The implement comprises a blade B having, in the particular form shown, a chisel point E the cutting edge F of which will preferably be perpendicular to the haft (shown dotted at G) or wooden handle.

Around the upper part of the head D a leverage of fulcrum surface A is made. This surface is preferably approximately flat on the upper side H and preferably projects more in the direction K than towards B, with the object of to a certain extent balancing the weight of the blade and thus making a better balanced implement for use, and also partly to provide a better placed leverage surface. A rib C supports and strengthens this surface.

For use the implement is fitted with a haft and is used like a pick axe or hoe. The blade which is made sharp and relatively slender for this purpose is driven into the ground, preferably to its full depth, so that the head of the instrument comes into contact with the ground and the part L of the leverage surface A preferably also enters the ground. Instead now of pulling on the handle as is done when working with a hoe the operator levers the haft or handle upwards. The flat, wide leverage surface is thus pressed on to the earth and using this surface as a leverage one and the ground against which it is pressed as a fulcrum the blade is forced up thus breaking up the hard pan in which its point is embedded. In this action the slight widening of the chisel edge which is illustrated assists as the point of the blade thus gets a better grip and causes a larger area of the sub-soil pan to be shattered at each stroke. The leverage or fulcrum surface is, however, the essential feature, as its width and size rapidly distributes the pressure over a larger and larger area of ground as the leverage starts so that the further movement or sinking of this surface into the ground almost immediately ceases, whereafter the blade turning about some point on this surface efficiently breaks up the pan and earth crust. The mass of the leverage surface is also a desirable feature of the implement in that it gives the blade (of necessity slender and light in construction in order to penetrate hard soils and sub-soil pans with the minimum effort) the weight required to carry the point well into the sub-soil pan and through any hard surface crust.

I claim:

1. A pan breaking and cultivating implement comprising a relatively slender blade adapted to be fixed approximately perpendicularly to the haft which is used therewith, which blade in use is adapted to be driven into the ground, and a relatively broad, flat or enlarged leverage or fulcrum surface in the neighbourhood of the junction of the blade with the said haft, about which surface the cultivator, after being driven into the ground, is adapted to be turned.

2. A pan breaking and cultivating implement according to Claim 1, the blade having a chisel shaped point the edge of which is preferably perpendicular to the direction of the haft, the chisel point preferably being relatively wide in comparison with the width of the blade.

3. A pan breaking and cultivating implement according to either of the preceding claims, the leverage or fulcrum surface comprising a flat surface surrounding or covering the end of the haft.

4. A pan breaking and cultivating implement according to any of the preceding claims in which the projecting parts of the leverage or fulcrum surface is stayed or strengthened by one or more ribs connecting it to the head of the implement.

5. A pan breaking and cultivating implement according to any of the preceding claims substantially as described and illustrated in the accompanying drawings.

SYDNEY ODLING JACKSON,

By his Attorneys,

REMFRY & SON.

Dated this 31st day of July 1923.

SGPI—L—V.3-10—17-5-24—50.

S. O. Jackson
No. 9547 of 1923

(1 Sheet)

Fig. 1.

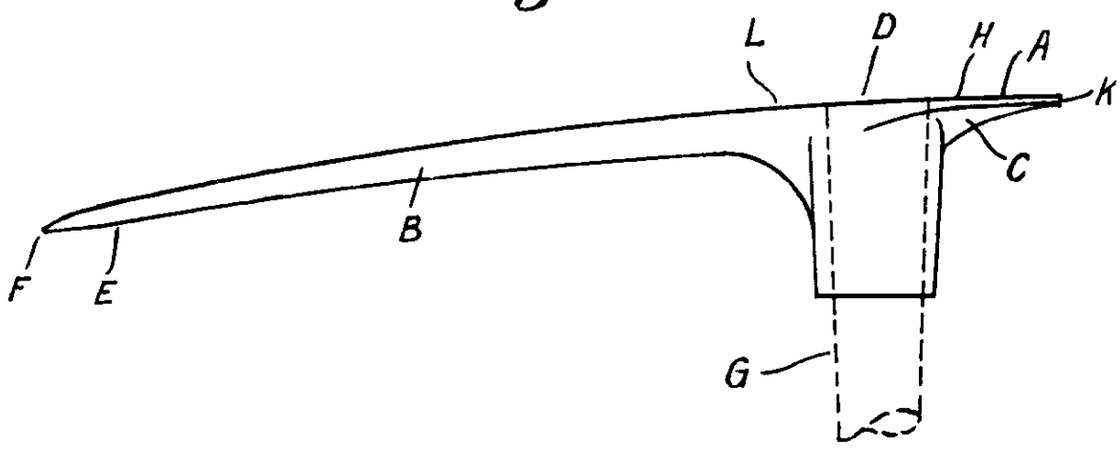
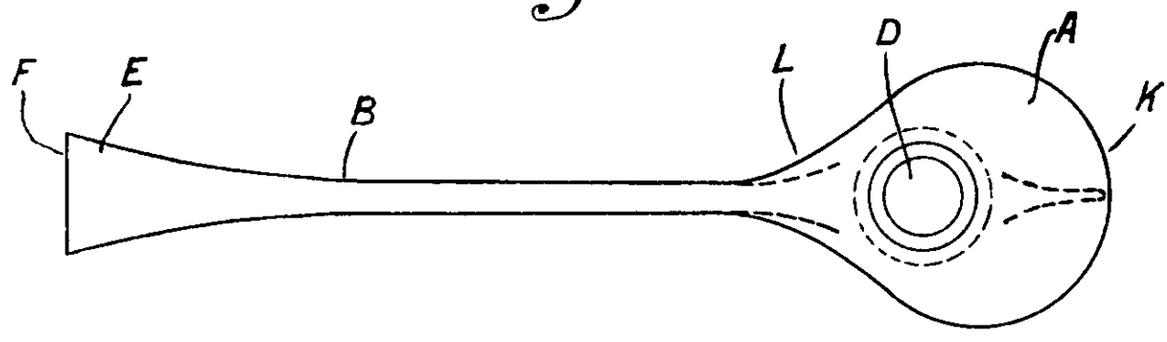


Fig. 2.



GOVERNMENT OF INDIA.

THE PATENT OFFICE.

1, Council House Street, Calcutta.

SPECIFICATION

No. 9908. 17th December 1923.

Accepted 21st April 1924.

IMPROVEMENTS IN OR RELATING TO SOIL-PAN BREAKING AND CULTIVATING IMPLEMENTS.

SYDNEY ODLING JACKSON, Tea Planter, of Gatonga Post Office, Assam, British India.

The following specification particularly describes and ascertains the nature of the invention and the manner in which the same is to be performed.

This invention relates to improvements in soil-pan breaking or cultivating implements and has for its object to provide modifications in and improved forms of the kind of instrument described in the Specification of my co-pending application for Indian Patent No. 9547, dated 31st July 1923.

In the said prior Specification a pan-breaking and cultivating implement was described having a relatively slender blade and a relatively broad, flat or enlarged leverage or fulcrum surface in the neighbourhood of the junction of the blade with the haft of the tool, about which surface the said blade was adopted to turn after its being driven deeply into the ground. By means of this tool the soil-pan, which forms a short distance below the surface of cultivated land, may be broken up. To effect this purpose the blade of the tool is driven through the upper crust of the soil and pierces the soil-pan below, being made of a sufficient length for this purpose, the enlarged leverage surface at the same time embeds itself a short distances into the earth and affords a suitable surface about which to lever the tool without said leverage surface sinking unduly into the soil. The haft or handle of the tool is then levered up and the implement, turning about some point near its head, breaks up the soil-pan and also the crust of the earth.

The implement described in my prior Specification only possessed one blade. The object of this invention is an improved implement to the one therein described. One improvement consists in so forming the leverage or fulcrum surface that it projects from the head of the implement chiefly or completely on the side of the head away from that from which the blade projects and/or in thickening up or weighting this projecting portion so that not only will it give the implement as a whole the necessary weight to carry its blade through the earth crust and to cause it to embed itself deeply in the soil, but will also give a better balance to the tool.

Another object is to provide a tool having two blades in conjunction with a leverage or fulcrum surface, and in which one blade may be made longer or be made stouter than the other.

Price: ONE RUPEE.

A still further object is to provide an attachment whereby an existing tool, such as a single or double-ended pick-axe may be converted to form a tool for breaking up soil-pan in the manner described in this or the prior Specification referred to.

Convenient forms the implement may take will now be described with reference to the accompanying drawings in which like letters of reference refer to like parts throughout and in which:

Figure 1 is a side view and Figure 2 a plan of an embodiment according to the prior Specification No. 9547 but having a thickened up or weighted leverage surface to better balance the implement.

Figures 3 and 4 show similar views of a preferred embodiment in which the implement has two blades.

Figures 5 and 6 show a side view and plan of an attachment whereby an ordinary single or double-ended pick-axe may be converted to be used and to be capable of functioning in the manner described, and

Figure 7 illustrates how such an attachment may be used.

The implement comprises a blade B, or two blades B^1 and B^{11}, preferably having chisel points E the cutting edge F of which may be perpendicular to the haft or wooden handle G of the tool.

Around the upper part of the head D a leverage or fulcrum surface A is made. This surface is preferably approximately flat on the upper side H. In the case of a single bladed implement the surface may project more in the direction K than towards B, with the object of to a certain extent balancing the weight of the blade and thus making a better balanced implement and also to provide a better placed leverage surface.

The projecting extension in the direction K may be made thicker than the part L on the blade side in order to improve the balance of the tool. Alternatively the whole of the leverage or fulcrum surface may project from the head of the implement on the side away from that from which the blade projects.

Ribs C may strengthen or support the leverage surface A at any desired point.

The method of using the implement is described in the prior Specification No. 9547 and will not need further explanation.

In the case of a two bladed implement, one blade B^1 may be made longer and more slender than the other blade B^{11} so that there may be a choice of blade length in use. To better balance the implement the shorter blade B^{11} may be made stouter or heavier as indicated in the drawings (see Figure 3). The leverage surface A around the head of the implement would function in the manner indicated.

In order to enable an existing tool such as a pick-axe to be used in the manner indicated an attachment may be provided. In Figures 5 and 6 a form such an attachment may take is illustrated, wherein the attachment is shown as like a flat-topped mushroom, the stalk of which forms a spike M adapted to be driven into the end of the haft G. An ordinary pick-axe, either single or double-ended, might thus be converted into a tool capable of being efficiently used for breaking up the soil-pan.

The instrument itself if preferred may be made in two parts, the one comprising the blade or blades attached to a head and the other the leverage or fulcrum surface which as a separate attachment may be driven unto the end of the haft to form the complete implement.

I claim:

1. A soil-pan breaking or cultivating implement of the kind described having a relatively slender blade adapted to be fixed approximately perpendicular to the haft which is to be used therewith, and a relatively broad, flat or enlarged leverage or fulcrum surface in the neighbourhood of the junction of the blade with the said haft, in which the said surface projects from the head of the instrument chiefly or completely on the side away from that from which the blade projects, for the purposes explained.

2. A soil-pan breaking or cultivating implement as claimed in Claim 1, the part of the surface projecting on the side away from that from which

the blade projects being made thicker or heavier to better balance the implement.

3. A soil-pan breaking or cultivating implement of the kind described, having two blades and a leverage or fulcrum surface around the head which is adapted to fit onto the haft.

4. A soil-pan braking or cultivating implement as claimed in Claim 3, the two blades being of different lengths or sizes, or one blade being stouter than the other.

5. An attachment whereby an ordinary single or double-ended pick-axe may be converted into a soil-pan breaking implement substantially as claimed in Claim 3 or 4.

6. A soil-pan breaking or cultivating implement as claimed in Claim 1, 3 or 4, in which the head and blade are made separate from the leverage or fulcrum surface which latter as a separate attachment is driven into the end of the haft of the implement to form the complete implement.

7. A soil-pan breaking or cultivating implement or part therefor according to any of the preceding claims substantially as described and illustrated in Figures 1 and 2, or Figures 3 and 4, or Figures 5 to 7 of the accompanying drawings.

SYDNEY ODLING JACKSON.

By his Attorneys,

REMFRY & SON.

Dated this 17th day of December 1923.

SGPI—L -v-3-40—16-5-24—50.

S. O. Jackson
№ 9908 of 1923

1 Sheet

Fig. 1

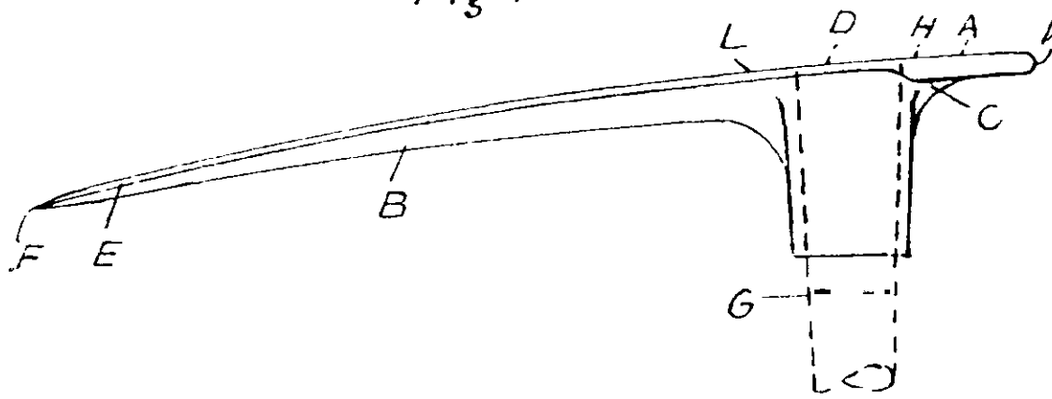


Fig. 2

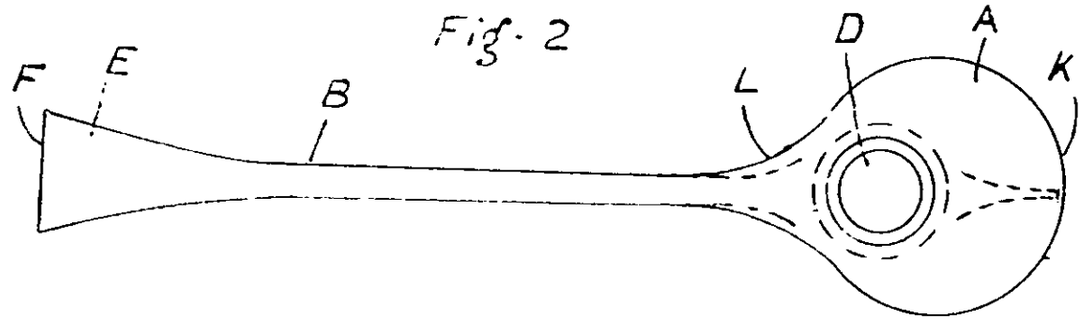


Fig. 3

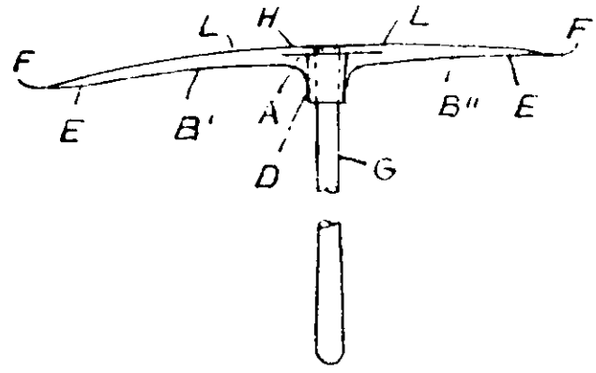


Fig. 5.

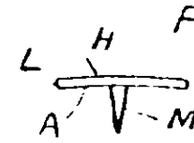


Fig. 6.

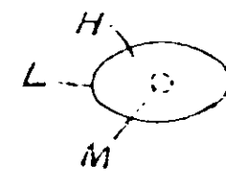


Fig. 7

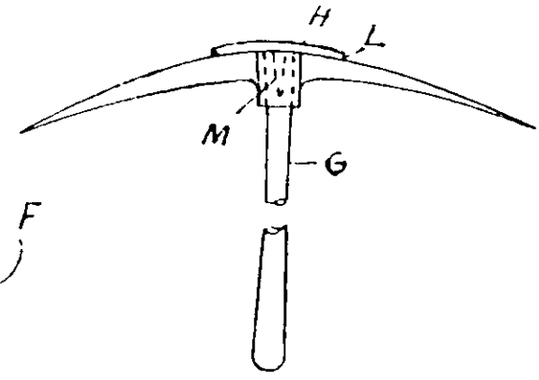
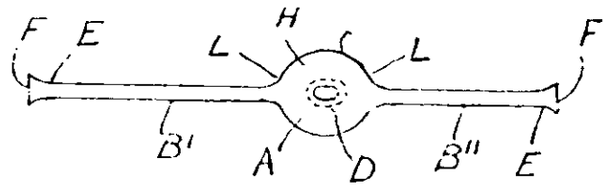


Fig. 4



783

(4

G. R. S. VI—G/32]

SUBJECT.....

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Diary No. of letter replied to 783

General and Revenue Secretariat

( )

, the *191*

Date of issue 10.9

Signed by

Section Part

File No. 33-23

Serial No 11

No. I.C. 1797

To

Messrs Kempson & Son,
Calcutta

Gentlemen,

With reference to your letter of 8.8.24 requesting your reconsideration of ~~your~~ application to file a specification in respect of invention No. 12-23 for improved cultivating & soil-pan breaking implement I am directed to inform-

over.

For attention to this office
878
re S/Lat 303·23-9 of
2·8 24 & 25 H. T. Stolen Cars Equip Report May

the Canadian Commissioner
for Railways
in Germany has ~~had~~ in order ahead passed on the matter

Yours faithfully

SM
8/9
Secy Rec
Dept

VS

List of enclosures.

Copied by

Examined by